

A NEW RACE OF CICINDELA WITH NOTES ON OTHER RACES AND SPECIES.

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In "The Cicindelinae of North America" published by Mr. E. D. Harris and me, and distributed by the American Museum of Natural History in 1916, the treatment of the American species by Dr. Walther Horn in "Genera Insectorum" was made known to our fellow students without any interpolation of our own views. That some difference of opinion should exist is, however, natural, and it is the purpose of the present paper to point out such differences as they appear to me. My notes will refer to the genus *Cicindela* only for Mr. Schaeffer has reviewed *Amblycheila* with more material in hand than any other author has assembled, and Colonel Casey has done the same for *Omus*, so that Dr. Horn's treatment of those genera has already been revised.

In *Cicindela* there are a few instances in which I can not agree with Dr. Horn's interpretation of the literature and the synonymy he consequently proposes. These are:

Cicindela scutellaris var. *lecontei*.

Dr. Horn alters this to *modesta* because Dejean in 1825 (Spec. Col., I, p. 52) described the color of *modesta* as "fusco-ænea" and as "brun-obscur un peu bronzé," giving an erroneous locality, "Saint-Domingue." His words fit better a faded specimen of var. *modesta* than they do any specimen of var. *lecontei*. Dejean was more likely in 1825 to have specimens from the Atlantic coast reach him through Palisot de Beauvois than from Nebraska, Manitoba, Ontario, where var. *lecontei* occurs. Finally in 1831 Dejean (Spec. Col., V, p. 210) says that *modesta* "noted in error in the collection of Palisot de Beauvois as coming from Saint Domingo" is "probably only a variety of *rugifrons* in which the color has become 'noir obscur.'" Haldeman did not describe var. *lecontei* until 1853 and there seems to me every evidence that Dejean knew nothing about that variety. I propose, therefore, to retain Haldeman's name for var. *lecontei*.

Cicindela obscura Say.

This name, cited by Dr. Horn for the race we call *modesta*, was preoccupied. Dr. Horn gives the citation "Trans. Am. Phil. Soc., 1818, p. 418, pl. 13, fig. 7." and differentiates the insect there described from the *modesta* of Dejean 1831 and subsequent authors. To me they seem synonymous as they did to Dejean and, *obscura* being preoccupied, the use of the name *modesta* is justified for the black form of *scutellaris*.

Cicindela trifasciata var. **tortuosa** Dej.

Dr. Horn changes this to *ascendens* Lec., remarking that in the Banks Collection there is a specimen of *ascendens* labelled Jamaica under *trifasciata*. Dejean described *tortuosa* in 1825 from North America and the Antilles as differing from the South American *trifasciata*. Leconte's description of *ascendens* was made in 1851. I can not see any reason for preferring it to Dejean's name.

There are also a few instances in which Dr. Horn points out the double use of a name without supplying a new name for the second use. These are:

Cicindela purpurea var. **auduboni** Lec.

This name was first assigned by Leconte (Journ. Bost. Soc. Nat. Hist., V, 1845, p. 207) to a green variety of *purpurea* from Yellowstone River. Later (Trans. Am. Phil. Soc., XI, 1856, p. 37) he used the same name for the black variety, in which he has been followed by subsequent authors till now. Unfortunately the first use will have priority and I propose *nigerrima* in place of *auduboni* Lec., 1856, for the black variety of *purpurea*. The *Cicindela graminea* of Schaupp will come close to being a synonym of *auduboni* as originally defined, but Dr. Horn retains both names.

Cicindela cartagena var. **hentzi** Geo. H. Horn.

I propose for the Lower Californian insect the name *hentziana*, which Dr. Horn in Proc. Cal. Ac. Sci., 1894, p. 307, wrongly called *hentzi* Dej.

Cicindela spreta Lec.

This name was originally applied (Ann. Lyc. Nat. Hist. N. Y., 1848, p. 177) to a dark form of *limbalis* occurring in Maine, for

which it should be retained. Later (l. c., 1856, p. 37) Dr. Leconte applied it to a black form from New York not since recognized, which may be sunk in synonymy.

There are a number of instances in which the relative rank assigned to various species does not accord with American ideas. Perhaps our being on the spot and possessed of large series from definite localities should give our judgment preference. Perhaps Dr. Horn viewing such matters from a distance and with his great knowledge of the Cicindelæ of the world is the better judge. I have no wish to assume to know better than he how our species and varieties should be ranked and willingly accept his judgment in many instances. There are, however, a few cases in which I feel so confident that he has erred that I would here record my opinion that

C. duodecimguttata and *C. repanda* are distinct species.

C. sexguttata and *C. patruela* are distinct species.

C. sperata and *C. cuprascens* are distinct species.

C. mirabilis is entitled to a higher rank than Dr. Horn gives it.

C. lantzi " " " " " " " " "

C. borealis " " " " " " " " "

C. criddlei " " " " " " " " "

C. carolina " " " " " " " " "

C. levettei " " " " " " " " "

C. Snowi " " " " " " " " "

C. woodgatei " " " " " " " " "

C. media " " " " " " " " "

On the other hand the *vibex* of Geo. H. Horn, 1866, can not properly be ranked as subordinate to the *sierra* I described in 1902. Priority would make *vibex* the species if the two were closely related; but I believe both are distinct species.

The following is a form of *longilabris* occurring in Newfoundland which requires a name:

***Cicindela longilabris novaterræ* new var.:**

Size and form of *C. longilabris*, but brilliant green bronze above and beneath, the labrum white, the legs dark, as usual. Markings of elytra comprise white humeral spot (sometimes very small or lacking), subhumeral spot, middle band, bent, not reaching the margin, and subapical spot. The markings are all narrow; the subapical spot is not at all enlarged as in the green forms from Colorado, nor are any of the white markings broad as in *perviridis* from the Pacific Coast.

Type (in my collection) collected by W. S. Genung near Bay St. George, Newfoundland, in July. Additional specimens in my collection were collected by Geo. P. Engelhart at the same place, also in July. Typical *C. longilabris* was found by Mr. Genung at Bay of Islands, but only the green form at Bay St. George. Mr. Engelhardt tells me that both forms may be found at Channel Village.

The Cicindelidæ of Newfoundland as far as known include the above described forms of *longilabris* and *C. tranquebarica* var. *horiconcensis*, Stephenville, *C. limbalis*, Bay of Islands, *C. duodecimguttata*, Little Codroy, Nicholville, Stephenville, *C. sexguttata* (Lecote, Trans. Am. Phil. Soc., XI, 1860). The exact locality for the last is unknown; all the others come from the west coast where Fernald (Rhodora, XIII, 1911, p. 117) found Carolinian plants on the sandy beaches and dunes. As far as we now know the localities named above mark the most northern limit of the family on our Atlantic coast.

MISSISSIPPI CICADAS, WITH A KEY TO THE SPECIES OF THE SOUTHEASTERN UNITED STATES.

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For several years Professor R. W. Harned has kindly sent to me for identification the cicadas collected by the students of the Mississippi Agricultural and Mechanical College. It has been a pleasure to go over the specimens, and now that records for eighteen species have accumulated, including a new one, it seems desirable to make a list of those known to occur in the state. Mississippi is rich in cicadas, and as far as the present records show, has even more species than Florida. This is easily explained, for some of the western species reach as far eastward as the valley of the Mississippi River. The discovery of the green-colored *Okanagana*, described in this paper, from the delta section of the state, has been a great surprise. It suggests that other unknown forms may still exist and emerge from time to time from their unseen feeding places beneath the sur-